Work Order January-07-14 3:		769			*110	769*							Page 1
Item ID: D Revision ID:)3463-7				Accept	*N90	1040	100)* S	Setup S	Start	*N	S1*
, ,	Orag Arm		6							:	Stop	*N	S2*
Start Date: 1, Required Date: 1,		Start Qty: Req'd Qty	5.00	*5* *5*		Cust Iten Custome			·				
	Process Plan:	MLJ	· .	Date: \\-\\-\\	Tooling: _ SPC (Y/N):		Date:	<u>.</u>			Start Stop		R1*
Sequence ID/ Work Center ID	(Operation Description	1	Datt.	Set Up/ Run Hours	Tool ID	•	Plan Code	Accept Qty	Rejec Qty		Aeject Number	Insp. Stamp
Draw Nbr	Revisi	on Nbr						: :					•
D3463	Rev B					`		-					
100 *1 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$	Small Fab N	Лето		0.00		· :		6				FF 14-06-
Small Fab		. 2	-Cut to 13.8 -Deburr -Bend end a	875" as per dwg D3463				30 9-89					· • • • • • • • • • • • • • • • • • • •
110	(QC5- Inspect	part comple	eteness to step on W/O	0.00 SW	>			6				
110 qc		N	Aemo		0.00 14/6/2	\mathcal{C}				-			
Quality Control					V		•		-	-			

120

CONVENTIONAL MILLING MACHINE

100
Mill Conv
Conventional Milling Machine

Memo

1-Mill as per dwg D3463 2-Drill hole & ream to 0.4385" as per dwg D3463 3-Deburr

0.00

0.00

DQA:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE								TART	
						WORK ORDER NON	-C(ONFO	RMANCE / U	IPDATE			_		AEROSPACE
QA Closed:			Date:		,						W	ork Order u	odate only		
Work Ord	er:					DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS		
	•••					Rework	1		Skid-tube	Crosstube	Γ] .	Water Jet		Engineering
Part I	۷o.					Scrap		1	Machining	Small Fab		Pro	d. Eng. Coor.		Quality
						Use-as-is		Thern	noforming	Finishing		Rec/Sto	re/Packaging		Other
NCR I	No.					Suspected Unapproved			Large Fab	Composite]	Supplier	···	
Root					Desci	ription of work order update		nitial	Ac	tion		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	1	QC Inspector
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Handling/Pre				1								÷.			
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Transport	┢	1			<u> </u>										
Unapproved		1													
		·					FA	ULT CAT	regory			<u></u>	•		
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		Bending				Bend		Folio/P	Program			Outside Dim	ensions		Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain				Over/Under	tolerance		Set-up
				Broken/Damage/Defect		Hardwa	ire			Part Incorre	ci		Temperature/Cure		
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspecti	ion Incomplete/U	Inqualified	L	Part Lost/M	issing		Weld
		Cuffs				Contamination	-	4	tions Incomplete/			Part Moved	į		Wrong Stock Pulled
	Crushing Coun		Countersink		Misalig	ned/off center		L	Positioned V			1			
	Heat Treat Cut Too Short		•		Mislabe			L	Power Loss/	Surge [Other			
20	L	Inspectio		Tube		Drawing		Misread							
£5.4		Marks/Ch				Drill Holes		Off-set							
Turning Sequence Fi		Finish	<u></u>	4	Calibration										
Wave/Twist in Tube		- 1	Fit/Function		Out of 9	Sequence									

110769 Page 2 January-07-14 3:03:00 PM Item ID: Accept *N900040100* D3463-7 Setup Start **Revision ID:** Stop **Item Name:** Drag Arm **Start Date:** 1/07/14 Start Oty: 5.00 **Cust Item ID:** Required Date: 1/07/14 **Req'd Qty:** 5.00 **Customer:** Reference: Start Run Process Plan: Date: Tooling: Date: Approvals: Stop *NR2* SPC (Y/N): Date: QC: Date: Tool # Plan Reject Reject Insp. Sequence ID/ Set Up/ Tool ID Accept **Operation Work Center ID** Description Code Qty Qty Number Stamp **Run Hours** 130 QC2- Inspect parts off machine FAI/FAIB 0.00 6 *130* 0.00 Memo **Quality Control** QC8- Inspect parts - second check 0.00 140 *1/0* QC 0.00 Memo Quality Control

150

150

Small Fab Small Fab

Small Fab

Memo

Grind .450" rad

0.00

0.00

DQA:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE								DART	
QA Closed:			Date:			WORK ORDER NON-	-C(ONFO	RMANCE / UI		Work	c Order up	odate only		AEROSPACE
Work Orde						DISPOSITION				AGAINST I	DEPA	RTMENT	/PROCESS		· · ·
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Part N	lo					Scrap			Machining	Small Fab	\dashv	Pro	d. Eng. Coor.		Quality
raiti	٠				_	Use-as-is			noforming	Finishing	\dashv		re/Packaging		Other
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Offset/Setup						·		-							
Process															
Supplier													-		
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Transport .									·		İ				
Unapproved							<u> </u>								
							FA	ULT CAT	regory						
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		Bending			<u> </u>	Bend	<u> </u>	4	Program	-	_	utside Dim			Pressure/Forced
		Centre No	ot Concer	ntric	_	BOM/Route	_	Grain			_	ver/Under	ŀ		Set-up
:		Cracks			<u> </u>	Broken/Damage/Defect	<u> </u>	Hardwa				art Incorre	, , , , , , , , , , , , , , , , , , ,		Temperature/Cure
		Crimp/Kir	nk/Ripple	:/Wave	-	Burrs	⊢	1 .	ion Incomplete/Ur	·		art Lost/Mi	issing		Weld
	_	Cuffs			\vdash	Contamination	<u> </u>	-∤	tions Incomplete/U	Jnclear -	_	art Moved	L		Wrong Stock Pulled
			Countersink	\vdash	1	gned/off center			ositioned V			اما			
		Heat Trea			<u> </u>	Cut Too Short	\vdash	Mislabe		L	P	ower Loss/	Surge [Other
Inspection Strip in Tube Drawing		•	L	Misread			_								
Marks/Chatter Drill Holes		4 ,	<u> </u>	Off-set			_								
		Finish	\vdash	4	Calibration -			 -							
	Wave/Twist in Tube			Fit/Function	Out of Sequence							_			

Work Ord January-07-14				*1	1076	9*							Page 3	
Item ID: Revision ID:	D3463-7			Accept	*N	900	<u>040</u>	100)*	Setup		*N	S1*	
Item Name:	Drag Arm										Stop	*N:	S2*	
Start Date:	1/07/14	Start Qty: 5.00	*5	*	C	ust Item I	D:							
Required Date	: 1/07/14	Req'd Qty: 5.00	*5	*	C	ustomer:								
Reference:			- .											
Approvals:	Process Pl	lan:	Date:	Tooling:		Da	ate:			Run	Start	*N	R1*	
	QC:		_ Date:	SPC (Y/N):	<u></u>	Da	ate:				Stop	*N	R2*	
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Ho		Tool ID	Tool#	Plan Code	Accep Qty	t Re	•	Reject Number	Insp. Stamp	
160		QC5- Inspect part comp	leteness to step on \											
160 QC Quality Control		Мето		. 0.00 .	0AS 27 01112				0					
-}				ľ	1111									_
170		Identify as per dwg & S	tock Location:	A002 0.00					ſ				14-0	1
170 Packaging		Memo		0.00									/	/E
Packaging													/	
180		QC21- Final Inspection	- Work Order Relea	ase 0.00									1	
120				0.00					MU	J	14.	0 FC	8	
OC		Mama		0.00										

Quality Control

A4-7-)

DQA:			Date:		WORK ORDER NON-CONFORMANCE / UPDATE						TAACT			
						WORK ORDER NON	-CC	ONFO	RMANCE / U			-		AEROSPACE
QA Closed:			Date:							V	Vork Order u	odate only		
Work Orde	or.					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
WOIK OIG	٠				_	Rework	1		Skid-tube	Crosstube		Water Jet	\neg	Engineering
Part N	No.					Scrap		1	Machining	Small Fab	Pro	d. Eng. Coor.	\dashv	Quality
	•					Use-as-is	1	B	noforming	Finishing	-	re/Packaging		Other
NCR I	No.					Suspected Unapproved		I .	Large Fab	Composite		Supplier		
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Root					Desc	ription of work order update	ı	Initial		tion	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descr	ription	Date	Verification	\perp	QC Inspector
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Handling/Pre														
Material														
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Offset/Setup	\vdash													
Process														
Supplier	Н						ŀ							
Training	$\vdash \vdash$													
Transport Unapproved	$\vdash \vdash$,					
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Landi	ne G	iear				General		OLI CA.				***************************************		
	$\overline{}$	Bending				Bend	П]Folio/P	rogram	Γ.	Outside Dim	ensions [\neg	Pressure/Forced
	\vdash	Centre No	ot Concer	ntric		BOM/Route	一	Grain		<u> </u>	Over/Under	F	_	Set-up
	\vdash	Cracks				Broken/Damage/Defect	\vdash	Hardwa	re	-	Part Incorre	l l	-	Temperature/Cure
	-	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspecti	ion Incomplete/Ur	ngualified	Part Lost/M	ssing	-	Weld
	\vdash	Cuffs	. ,,	•		Contamination		i '	ions Incomplete/l	·	Part Moved	Ī	\ر	Wrong Stock Pulled
	${oldsymbol{ o}}$	Crushing				Countersink		4	ned/off center	<u> </u>	Positioned V	۔ Vrong		-
	-	Heat Trea	it		<u> </u>	Cut Too Short	-	Mislabe			Power Loss/		\neg	Other
	П	Inspection	n Strip in	Tube		Drawing		Misread	1	_		_		
		Marks/Ch	atter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of 0	Calibration					
Wave/Twist in Tube			Fit/Function		Out of 9	Sequence								

Page 1

Work Order ID:

110769

Parent Item:

D3463-7

Parent Item Name:

Drag Arm

Start Date: 1/07/14

Required Date: 1/07/14

Start Qty: 5.00

Required Qty: 5.00

Comments:

IPP REV> A 05.11.18

new issue

EC

IPP Rev:B Added Step 7 08-11-04 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.750W.120		Purchased	No			100	f	52.0000	1.15625	A			

304 ss round tube .750 x .120w

 Location
 Loc Oty
 Loc Code

 MAT017
 52

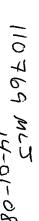
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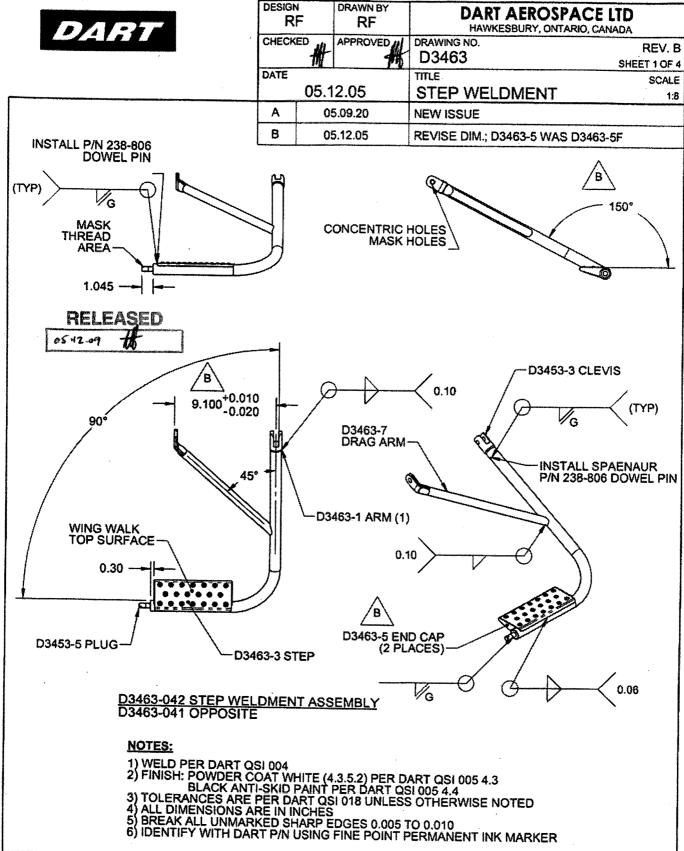
8.10 FF 14-06-25

DQA:			Date:			•								TAAT
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QA Closed:			Date:								Work Order u	pdate only		
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					_	Rework			Skid-tube	Crosstube		Water Jet		Engineering
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		+	۱ ۲					<u> </u>			1 0: 0	1	_	
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Landi	nø (Gear	- · · · - · -			General	• • • • • • • • • • • • • • • • • • • •	021 0/1						
		Bending				Bend	Г] Folio/F	Program	Г	Outside Dir	nensions		Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route	\vdash	Grain			Over/Unde		┢	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre		Г	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/I	Unqualified	Part Lost/N	lissing		Weld
		Cuffs				Contamination		Instruct	tions Incomplete	/Unclear	Part Moved	1		Wrong Stock Pulled
		Crushing				Countersink		-	gned/off center		Positioned		_	-
		Heat Trea	it			Cut Too Short		Mislabe	eled		Power Loss	/Surge		Other
		Inspection	n Strip in	Tube		Drawing		Misrea	d	•				
		Marks/Ch	atter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of	Calibration					
	Wave/Twist in Tube			Fit/Function		Out of	Sequence							

D3065-5DART AEROSPACE LTD	Work Order:	110769
Description: Drag Arm	Part Number:	D3463-7
Inspection Dwg: D3463 Rev: B		Page 1 of 1

Drawing Dimension		FIR	ST ARTICLE II	NSPECTI	ON CHE	CKLIST		
Dimension Tolerance Dimension Accept Reject Inspection Comments			X First Arti	cle	Prot	otype		
0.550	_	Tolerance	,	Accept	Reject		Con	nments
0.550	13.50	+0.000/-0.030	13.500	υ/		Caliner	Jesch	-08
## ## ## ## ## ## ## ## ## ## ## ## ##	0.550	+/-0.010	0.551	V				
Measured by:	Ø0.438	+0.006/-0.001	0.439	V		n		
Measured by:	R0.450	+/-0.030						
Measured by:		iou.				,		
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Rev Date Change Revised by Approved	· · ·			1416	7/07		Date:	N/A
A 06.06.28 New Issue KJ/JLM -							Povisod by	Annroyad
, , , , , , , , , , , , , , , , , , ,	A 06.06.28						KJ/JLM	- Approved



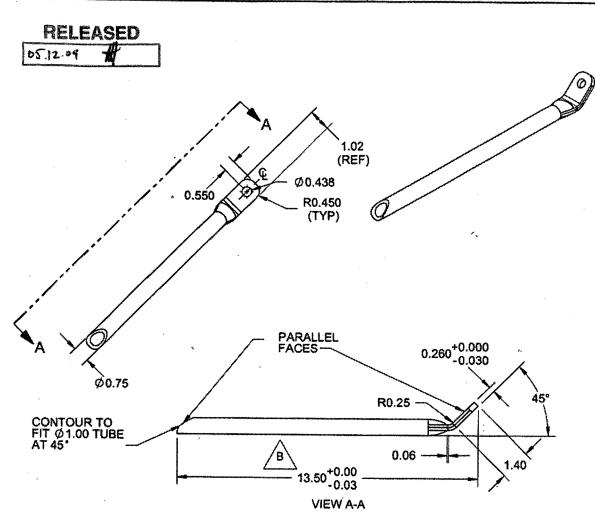


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DESIGN RF	DRAWN BY RF	DART AEROSPACE HAWKESBURY, ONTARIO	
CHECKED	APPROVED	DRAWING NO. D3463	REV. B SHEET 3 OF 4
DATE 05.1	12.05	STEP WELDMENT	SCALE 1:4



NOTES:

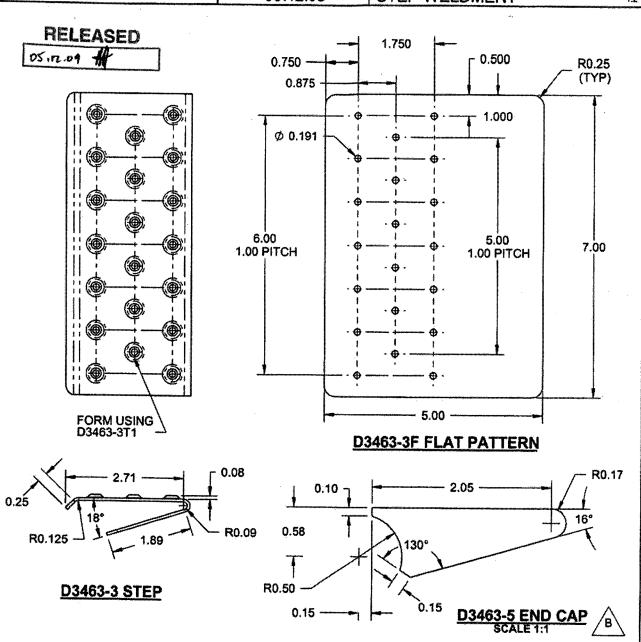
1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR0.750W.120) 2) FINISH: NONE 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 4) ALL DIMENSIONS ARE IN INCHES 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

D3463-7 DRAG ARM

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DESIGN RF	DRAWN BY RF	DART AEROSPA HAWKESBURY, ONTARIO	
CHECKED #	APPROVED	D3463	REV. B SHEET 4 OF 4
DATE 05.1	2.05	STEP WELDMENT	SCALE



NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.060 THICK (REF. DART SPEC. M304S16GA)
 2) FINISH: NONE
 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) ALL DIMENSIONS ARE IN INCHES
 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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DART AEROSPACE LTD



Description: ①	198 Qr	n		·	Wo	ork Orde	er: B/10769
Inspection Drawing			Rev:	B	Par	t Numbe	er: 03463-7
mapeetton brevening			CDEC	FION	CHEET		
	7	IN:	SPEC	IUN	SHEET	ection	Comments
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Mietriod of map	-	X S
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Date	9-89	Date Whole	g6 g6 g89	Date //	7/1/26	D	ate